

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-2 (canceled)

1 Claim 3 (currently amended): ~~The~~ An optical component
2 (1) ~~as in claim 1,~~ comprising a base unit (3); a substrate
3 (5) supported by the base unit, the substrate having an
4 optically functional surface in at least one substrate
5 region (7); and a coating (9) on the substrate that extends
6 at least in part beyond the substrate (5) and onto the base
7 unit (3) wherein the substrate region (7) is located in
8 predefined fashion in a specific relationship to a reference
9 (13) on the base unit (3) which reference (13) is defined by
10 two plane reference surfaces on the base unit (3), wherein
11 orientation of the substrate region (7) deviates from an
12 orientation that is selectable relative to the reference
13 (13) by not more than 0.25 degrees.

1 Claim 4 (currently amended): ~~The~~ An optical component
2 (1) ~~as in claim 1,~~ comprising a base unit (3); a substrate
3 (5) supported by the base unit, the substrate having an
4 optically functional surface in at least one substrate
5 region (7); and a coating (9) on the substrate that extends

6 at least in part beyond the substrate (5) and onto the base
7 unit (3) wherein the substrate region (7) is located in
8 predefined fashion in a specific relationship to a reference
9 (13) on the base unit (3) which reference (13) is defined by
10 two plane reference surfaces on the base unit (3), wherein
11 the substrate region (7) is planar and the reference (13)
12 comprises one or several plane surfaces on the base unit
13 (3), where all surfaces comprising the reference (13) are
14 parallel to one another and to the substrate region (7)
15 within an angular tolerance of 0.15 degrees.

1 Claim 5 (currently amended): The optical component
2 (19) as in ~~claims 1 or claim 4~~, wherein the reference (13)
3 and the substrate region (7) extend in one plane.

1 Claim 6 (currently amended): The optical component (1)
2 as in ~~one of claims 1, claim 3~~ or 4, wherein the substrate
3 (5) comprises a glass substrate with a structured surface.

1 Claim 7 (currently amended): The optical component (1)
2 as in ~~one of the claims 1, claim 3~~ or 4, wherein the
3 functional surface in the substrate region (7) has the
4 optical function of a mirror, a color filter, a polarizing
5 beam splitter, a refractive or a diffractive element.

1 Claim 8 (currently amended): An optical switch (31)

2 incorporating the optical component (1) as in ~~one of the~~
3 ~~claims 1, claim 3~~ or 4.

1 Claim 9 (previously presented): A method for
2 fabricating an optical component (1), comprising the steps
3 of:

4 a) producing a base unit (3);

5 b) producing a substrate (5) with an optically
6 functional surface in a substrate region (7);

7 c) assembling the substrate (5) and the base unit (3)
8 into a component; and

9 d) coating the component including the optical
10 surface of the substrate (5) in a vacuum coating process so
11 that the coating extends at least in part beyond the
12 substrate (5) and onto the base unit (3); wherein for
13 assembling the substrate (5) with the base unit (3), an
14 assembly device (17) is used that contains a support plate
15 (19) with which the substrate region (7) is brought into
16 contact, said assembly device (17) containing a counterpart
17 (21) for a reference (13) of the base unit, wherein the
18 counterpart is brought into contact with the reference (13),
19 with the support plate (19) and the counterpart (21)
20 remaining in a rigid position relative to each other at
21 least during the step of assembling the substrate (5) and
22 the base unit (3), while the substrate region (7) and the
23 reference (13) on the base unit (3) are positioned in

24 relation to each other in a manner predefined by the
25 assembly device (17).

Claim 10 (canceled)

1 Claim 11 (previously presented): The method as in
2 claim 9, wherein by means of a first adjustment jig (23)
3 provided on the assembly device (17) the substrate (5) is
4 aligned on the support plate (19).

1 Claim 12 (original): The method as in claim 11,
2 wherein by means of a second adjustment jig (25) the
3 reference (13) of the base unit (3) is aligned on the
4 counterpart (21).

1 Claim 13 (previously presented): The method as in one
2 of the claims 9 or 11, wherein as the substrate (5) is
3 produced, a polished glass surface is generated in at least
4 a partial area of the substrate region (7), and for
5 assembling the substrate (5) with the base unit (3) an
6 assembly device (17) is employed which at least in a surface
7 area of the support plate (19) consists of quartz and that
8 the polished glass surface of the substrate region (7) is
9 molded thereon.

1 Claim 14 (previously presented): The method as in one

2 of the claims 9 or 11, wherein upon contact between the
3 substrate region (7) and a surface of the support plate
4 (19), a negative pressure is created in a gas port (27)
5 provided in a surface of the support plate (19) of the
6 assembly device (17), as compared to ambient atmospheric
7 pressure around the assembly device (17), whereby, during
8 assembly with the base unit (3), the substrate (5) is held
9 in position on the support plate (19).

1 Claim 15 (previously presented): The method as in one
2 of the claims 9, 11 or 12, wherein for assembling the
3 substrate (5) with the base unit (3) an adhesive layer (11)
4 is used which comprises a UV-curing cement and which at
5 least in part fills a space between the substrate (5) and a
6 substrate-accepting interface (15) of the base unit (3),
7 firmly compensating for any height variations of that space.

1 Claim 16 (previously presented): The method as in one
2 of the claims 9, 11 or 12, wherein the substrate (5) and the
3 base unit (3) are assembled by means of a UV-curing adhesive
4 cement and that the substrate (5) is irradiated, via the
5 assembly device (17) or by a light source (29) incorporated
6 in the assembly device (17) or through a gas port (27),
7 causing the adhesive cement to cure.